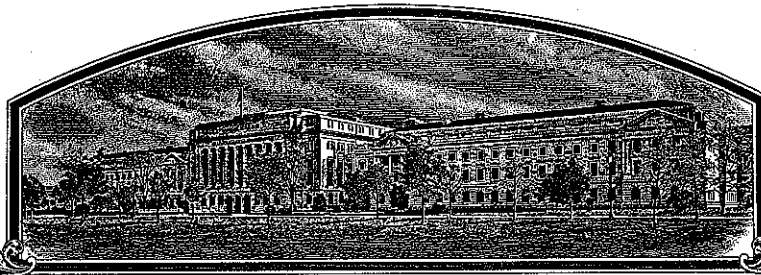


No.

200700282



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*P. J. International Seeds and Rutgers, The
State University of New Jersey*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC FURNISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SAID APPLICANT(S) TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED IN THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, HARD

'Gotham'

*In Testimony Whereof, I have hereunto set my hand
and caused the seal of the Plant Variety
Protection Office to be affixed at the City of
Washington, D.C. this fifth day of June, in the
year two thousand and eight.*

Attest:

[Signature]

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER DLF International Seeds and Rutgers, The State University of New Jersey (4/23/2007)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME IS-FL 28	3. VARIETY NAME Gotham
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PO Box 229/175 West H Street Halsey, OR 97348 USA		5. TELEPHONE (include area code) 541-369-2251	FOR OFFICIAL USE ONLY PVPO NUMBER #200700282
		6. FAX (include area code) 541-929-4087	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon	9. DATE OF INCORPORATION 1972	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Stephen W. Johnson DLF International Seeds PO Box 229/175 West H Street Halsey, OR 97348			FILING DATE 4/23/2007

FILING AND EXAMINATION FEES:

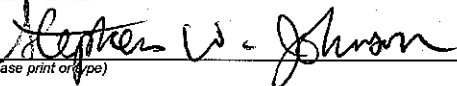
FEES
\$ **4,382.00**
DATE **4/23/2007**
CERTIFICATION FEE:
\$ **768.00**
DATE **4/29/2008**

11. TELEPHONE (Include area code) 541-369-2251	12. FAX (Include area code) 541-929-4087	13. E-MAIL STEVEJ@intlseed.com
14. CROP KIND (Common Name) Hard Fescue	16. FAMILY NAME (Botanical) Graminae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.
15. GENUS AND SPECIES NAME OF CROP Festuca brevipila	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input checked="" type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Stephen Johnson		NAME (Please print or type)	
CAPACITY OR TITLE Director of Research	DATE April 5, 2007	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) 'Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVPOmail@usda.gov
Homepage: <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

#200700282

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870.
<http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

August 31, 2006

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

EXHIBIT A

Origin and Breeding History of Gotham Hard Fescue

Gotham hard fescue (*Festuca longifolia*) is an advanced generation cultivar selected from the maternal progenies of 23 clones. Gotham was developed for improved turf performance and freedom from disease. One hundred percent of the parental germplasm in Gotham contained the Neotyphodium endophyte.

The germplasm used in the development of Gotham hard fescue were developed using a germplasm and population improvement program initiated at the New Jersey Agricultural Experiment Station in 1962. Although hard fescue originated in Europe and performs best in cool-summer climates typical of northwestern Europe and the British Isles, millions of kilograms of seed have been used in turfgrass mixtures throughout the eastern United States. The performance of common types of hard fescue has been reasonably good on moderately fertile, moderately acid, well drained soils in the cool-summer parts of New England and upstate New York, especially under conditions where light shade with adequate air circulation produce a cooling effect. In warmer regions, only a few elite plants have survived in old turfs. Many of these rare, outstanding plants have persisted and spread to produce attractive patches of turf often exceeding one meter in diameter. The origin of these plants is unknown. However, selected plants appeared to be many decades old.

An intensive germplasm collection effort was initiated by Rutgers University in 1962 to select and utilize the best plants surviving in old turfs. Many weeks were spent examining old turfs for attractive, well-adapted plants of hard fescue and other useful turfgrasses. Promising plants selected from old turfs were subjected to clonal and progeny evaluation in closely mowed turf trials and spaced-plant nurseries. Of several hundred hard fescue plants collected, only a few dozen were saved for further breeding work. These elite selections were crossed with other promising selections from the germplasm collection program or from current cycles of the breeding program. Progenies from these crosses were included in population improvement programs, which included screening in a greenhouse for improved disease resistance, in spaced-plant nurseries for increased seed yield and uniformity, and in closely mowed turf trials for improved turf performance and increased stress tolerance. Extensive screening for improved disease resistance was conducted under greenhouse conditions as well as in spaced-plant nurseries and closely mowed turf trials at North Brunswick, and Adelphia, NJ.

Each of the parental clones of Gotham were selected from progeny turf plots at the Rutgers Plant Science Research and Extension Farm at Adelphia, NJ. These progeny plots were tillered to individual plants and planted into a spaced-plant nursery in the fall of 2001. During the spring of 2002, 42 clones with uniform morphology (low growth habit, high seed yield, medium-dark green color etc.) were selected from these nurseries and moved to an isolated crossing block. Forty plants were harvested with excellent floret fertility and freedom from disease. Two plants were not harvested due to poor

floret fertility. One gram of each of the 40 lines was sent to DLF International Seeds. This seed was used to establish a 4800 plant spaced plant nursery at DLFIS' research station near Tangent, Oregon. This nursery consisted of two replications of 60 plants from each progeny family. Additionally, single plots of each progeny line were seeded in a turf trial at Adelphia, NJ in the fall of 2002.

Prior to anthesis in 2003 approximately 25% of the plants in the nursery were removed. Plants that were rogued had one or more of the following traits: coarse leaves, lighter green color, high susceptibility to leaf sport, or late maturity. All of the plants in four of the families were also removed prior to anthesis because of poor family performance in the 2002 sown Adelphia, NJ turf trial. The plants that remained in the nursery were allowed to interpollinate. Seed from each of the 36 remaining families was harvested separately. A bulk was made of the seed from 23 of the families which had exhibited the best turf quality in the 2002 Adelphia, NJ turf trial. This seed was the first breeder seed of the variety. Breeder seed of Gotham is maintained by DLF International Seeds, Halsey, Oregon.

The variety Gotham has appeared uniform and stable during multiplication from breeder generation to foundation generation and from foundation to certified generation during the years 2003-2006. Gotham has a small percentage ($<0.1\%$) of plants that are somewhat taller and coarser ^{than} the rest of the population. The percentage of these plants appears to be stable when seed is multiplied from breeder to foundation to certified generation. ^{variant} (Oct 1/1/08)

EXHIBIT B

Statement of Distinctness

Gotham hard fescue (*Festuca longifolia*) is a cool-season bunch grass developed for use in turf.

Gotham is most similar to the variety Aurora. Gotham differs from this variety in characteristics including, but not necessarily limited to the following:

- 1) Gotham has a significantly shorter mature plant height than Aurora when grown in western Oregon (42.1 cm vs. 48.2cm). (Table 2).
- 2) Gotham has a wider average flag leaf width than Aurora when grown in western Oregon (1.90 mm vs. 1.16 mm). (Table 2).
(BT: 3/28/2008)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Fine Leaved Fescues (*Festuca* spp.)

NAME OF APPLICANT (S) DLF International Seeds and Rutgers, The State University of New Jersey Oct. 4/24/2008	TEMPORARY OR EXPERIMENTAL DESIGNATION IS - FL 28	VARIETY NAME Gotham
ADDRESS (Street and No. or RD No., City, State, Zip Code and Country) PO Box 229 Halsey, OR 97348 USA		FOR OFFICIAL USE ONLY PVPO NUMBER #200700282

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Use leading zeroes when necessary (e.g.,

0 8 9 or 0 9). Characteristics described including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACE PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used:

Describe location of test area, conditions and number of plants used:

1. SPECIES: (With comparison varieties for use below – use varieties within species of application variety)

- | | | | | |
|---------------------------------------|--|---------------|---------------------|----------------|
| <input checked="" type="checkbox"/> 5 | 1 = <i>F. rubra</i> spp. <i>commutata</i> (Chewings) | 11 = Cascade | 12 = Highlight | 13 = Jamestown |
| | 2 = <i>F. rubra</i> spp. <i>litoralis</i> (Creeping Red) | 14 = Banner | 15 = Barfalla | 23 = Merlin |
| | 3 = <i>F. rubra</i> spp. <i>rubra</i> (Spreading Red) | 21 = Dawson | 22 = Starlight | 33 = Fortress |
| | 4 = <i>F. ovina</i> (Sheep) | 24 = Pennlawn | | |
| | 5 = <i>F. longifolia</i> (Hard) | 31 = Boreal | 32 = Ruby | 53 = Scaldis |
| | 6 = <i>F. tenuifolia</i> (Fine-Leaved Sheep) | 34 = Ensylva | 52 = Biljart (C-26) | |
| | 7 = Other (Specify) <i>F.</i> _____ | 41 = Covar | 62 = Barok | |
| | | 51 = Durar | | |
| | | 61 = Panda | | |

2. CYTOLOGY:

<input type="checkbox"/> <input type="checkbox"/>	Chromosome Number	<input type="checkbox"/>	Ploidy	1 = diploid	2 = tetraploid	3 = hexaploid	4 = octoploid
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3. ADAPTATION: (0 = Not Tested, 1 = Not Adapted, 2 = Adapted)

<input checked="" type="checkbox"/> 2	Northeast	<input checked="" type="checkbox"/> 2	Southeast	<input checked="" type="checkbox"/> 2	North Central	<input type="checkbox"/>	Pacific Northwest	<input type="checkbox"/>	Other (Specify) _____
---------------------------------------	-----------	---------------------------------------	-----------	---------------------------------------	---------------	--------------------------	-------------------	--------------------------	-----------------------

4. MATURITY: Date First Headed (Panicle Emergence) Location(s) of Trial(s)

☒ 3 Maturity Class:

1 = Very Early (Covar)	2 = Early (Highlight)	3 = Medium Early (Boreal, Dawson)	4 = Medium Late (Cascade, Ruby)
5 = Late (Jamestown, Agram)	6 = Very Late		

Date Headed May 1

#200700282

4. MATURITY: (continued)

<input type="text" value=""/>	Days earlier than	<input type="text" value=""/>	} Comparison Variety
	Maturity Same as <i>Aurora</i>	<input type="text" value=""/>	
<input type="text" value="02"/>	Days later than	<input type="text" value="53"/>	

5. PLANT HEIGHT: (At Maturity; to Top of Panicle; Average of 10 Tallest Culms)

<input type="text" value="421"/>	mm Height		} Comparison Variety
<input type="text" value="61"/>	mm shorter than <i>Aurora</i>	<input type="text" value=""/>	
	Height the same as	<input type="text" value=""/>	
<input type="text" value=""/>	mm taller than	<input type="text" value=""/>	

6. GROWTH HABIT: (Mature)

<input type="text" value="2"/>	1 = Erect (Ruby)	2 = Semi-erect (Highlight)	3 = Prostrate (Silvana)
--------------------------------	------------------	----------------------------	-------------------------

7. RHIZOMES:

<input type="text" value=""/>	mm Length	<input type="text" value=""/>	mm Width	<input type="text" value=""/>	mm Internode Length
<input type="text" value="1"/>	1 = Absent (Highlight)	2 = Weakly Creeping (Dawson)	3 = Strongly Creeping (Boreal)		
	4 = Very Strongly Creeping (Fortress)				

8. LEAF BLADE:

<input type="text" value="4"/>	Color:	1 = Light Green (Starlight)	2 = Medium Light Green (Highlight)	3 = Medium Dark Green (Ruby, Agram)
		4 = Dark Green (Jamestown, Manoir)	5 = Bluegreen (Saphir)	6 = Graygreen (Scaldis)
		7 = Other (Specify) _____		
<input type="text" value="1"/>	Glaucoity (Sowing Year):	1 = Absent (Koket)	2 = Present (Vendome)	
<input type="text" value="2"/>	Anthocyanin:	1 = Absent	2 = Present	<input type="text" value="1"/> Hairs (Basal): 1 = Absent 2 = Present
<input type="text" value="2"/>	Margins:	1 = Smooth	2 = Semi-rough	3 = Rough
<input type="text" value="1"/>	Margin folding (closure):	1 = Rolled inward (closed-Highlight)	2 = Flat (open-Jamestown, Engina)	
<input type="text" value="1"/>	Width class:	1 = Very Fine (Agram, Frida)	2 = Fine (Jamestown, Highlight, Banner, Dawson)	
		3 = Medium Fine (Fortress, Ruby Scaldis)	4 = Medium Coarse (Engina)	

<input type="text" value="033"/>	mm Length (flag leaf)		} Comparison Variety
<input type="text" value=""/>	mm Shorter than	<input type="text" value=""/>	
	Blade length same as <i>Aurora</i>	<input type="text" value=""/>	
<input type="text" value=""/>	mm Longer than	<input type="text" value=""/>	} Comparison Variety
<input type="text" value="1.90"/>	mm Width (flag leaf)	<input type="text" value=""/>	
<input type="text" value=""/>	mm Narrower than	<input type="text" value=""/>	
	Blade width same as	<input type="text" value="53"/>	} Comparison Variety
<input type="text" value="0.74"/>	mm Wider than <i>Aurora</i>	<input type="text" value=""/>	

9. LEAF SHEATH:

<input type="text" value="2"/>	Anthocyanin (seedling):	1 = Absent (Highlight)	2 = Present (Jamestown, Fortress, Marga)
<input type="text" value="2"/>	Auricle Hairiness:	1 = Absent	2 = Present
<input type="text" value="2"/>	Margins:	1 = Open (Highlight)	2 = Closed (Jamestown)

10. PANICLE: (Mature plant)

<input type="text" value="2"/>	Shape:	1 = Narrow-tapering	2 = Ovate	3 = Oblong	4 = Other (Specify) _____
<input type="text" value="2"/>	Type:	1 = Open	2 = Intermediate	3 = Compact	
<input type="text" value="2"/>	Orientation:	1 = Erect 42 %	2 = Nodding 58 %		
<input type="text" value="1"/>	Branch Pubescence:	1 = Glabrous	2 = Pubescent		
<input type="text" value="4"/>	Anther Color:	1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish 5 = Reddish 6 = Other (Specify) _____			
<input type="text" value="4"/>	Glume Color (At 50% flowering)				
<input type="text" value="570"/>	mm Length				
<input type="text" value="17"/>	mm Shorter than	<input type="text" value="53"/>	} Comparison Variety		
<input type="text" value=""/>	Panicle length same as	<input type="text" value="53"/>			
<input type="text" value=""/>	mm Longer than	<input type="text" value=""/>			

11. PALEA:

<input type="text" value="2"/>	Hairs (On keels or margins):	1 = Absent (Banner)	2 = Short (Agram, Scaldis, Olds)
		3 = Long (Ranier, Fortress, Jamestown)	

12. LEMMA: (Mature)

<input type="text" value="1"/>	Hairs:	1 = Absent (Jamestown)	2 = Several	3 = Many (Highlight)
<input type="text" value="47"/>	mm Lemma Length			
<input type="text" value=""/>	mm Shorter than	<input type="text" value="53"/>	} Comparison Variety	
<input type="text" value=""/>	Lemma length same as	<input type="text" value="53"/>		
<input type="text" value=""/>	mm Longer than	<input type="text" value=""/>		
<input type="text" value="118"/>	mm Lemma Width			
<input type="text" value=""/>	mm Narrower than	<input type="text" value="53"/>	} Comparison Variety	
<input type="text" value=""/>	Lemma width same as	<input type="text" value="53"/>		
<input type="text" value="013"/>	mm Wider than	<input type="text" value="53"/>		
<input type="text" value="214"/>	Awns:	1 = Absent	2 = Present	
<input type="text" value="14"/>	mm Awn Length			
<input type="text" value=""/>	mm Shorter than	<input type="text" value="53"/>	} Comparison Variety	
<input type="text" value=""/>	Awn length same as	<input type="text" value="53"/>		
<input type="text" value=""/>	mm Longer than	<input type="text" value=""/>		

13. SEED: (With lemma & palea)

<input type="text" value="1"/>	Size Class (g/1000 seed):	1 = < .9 g (Biljart, Dawson)	2 = .9 - < 1.1 g (Jamestown, Highlight)
		3 = 1.1 - 1.3 g (Fortress, Novorubra)	4 = > 1.3 g (Boreal, Golfrood)
<input type="text" value=""/>	mm per 1000 seed		
<input type="text" value=""/>	mg per 1000 seed less than	<input type="text" value="53"/>	} Comparison Variety
<input type="text" value=""/>	Seed Weight same as	<input type="text" value="53"/>	
<input type="text" value=""/>	mg per 1000 seed more than	<input type="text" value=""/>	

14. DISEASE INSECT, AND NEMATODE REACTION: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> Melting-out (<i>Drechslera poae</i>) (<i>Helminthosporium vagans</i>)	<input type="checkbox"/> Stripe Rust (<i>P. striiformis</i>)
<input checked="" type="checkbox"/> Leaf Spot (<i>D. siccans</i>)	<input type="checkbox"/> Leaf Rust (<i>P. poae-nemoralis</i>)
<input type="checkbox"/> Net Blotch (<i>D. dictyoides</i>)	<input type="checkbox"/> <i>P. crandallii</i>
<input type="checkbox"/> Leaf Spot (<i>Bipolaris sorokiniana</i>)	<input type="checkbox"/> Pythium Blight (<i>Pythium ultimum</i>)
<input type="checkbox"/> Brown Patch (<i>Rhizoctonia solani</i>)	<input checked="" type="checkbox"/> Red Thread (<i>Corticium fusciforme</i>)
<input type="checkbox"/> Powdery Mildew (<i>Erysiphe graminis</i>)	<input checked="" type="checkbox"/> Dollar Spot (<i>Sclerotinia homeocarpa</i>)
<input type="checkbox"/> Stripe Smut (<i>Ustilago striiformis</i>)	<input type="checkbox"/> Insect _____
<input type="checkbox"/> F. Patch, Pink Snow-mold (<i>Fusarium nivale</i>)	<input type="checkbox"/> Nematode _____
<input type="checkbox"/> Fusarium blight (<i>F. tricinctum</i> , <i>F. roseum</i>)	<input type="checkbox"/> Other _____
<input type="checkbox"/> Gray snow mold (<i>Typhula lotana</i>)	<input type="checkbox"/> Other _____
<input type="checkbox"/> Stem rust (<i>Puccinia graminis</i>)	<input type="checkbox"/> Other _____

15. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE SUBMITTED VARIETY: For the following characteristics indicate the Degree of Resemblance by placing the column marked D.R. with one of the following numbers:

1 = Application variety is less than comparison variety

2 = Same as

3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Rhizome Length	Aurora	2	Growth Habit	Aurora	1
Leaf Width	Scaldis	2	Leaf Color	Scaldis	2
Panicle Color	Aurora	2	Panicle Shape	Aurora	2
Winter Color	Scaldis	2	Cold Injury		
Shade Tolerance	Scaldis	2	Heat		
Drought			Disease*		

* Specify each disease evaluated.

16. ADDITIONAL DESCRIPTION: (Use additional sheets as required).

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Varieties used for comparison should be used as may be appropriate, such as for disease reactions. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests results. Providing such information may aid in conducting a more thorough review of the applicants claims of distinctness.

Table 1. Heading dates (as day of year) of hard fescue varieties grown near Philomath, Oregon in 2005 and 2006. The Philomath test was grown on Willamette silt loam . with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. The trials was conducted using a randomized complete bloc design. Plant spacings were 1.5 feet within rows and 3 feet between rows.

NAME	2005	2006	Average
Reliant	119.5	116.3	117.9
Eureka II	120.4	118.4	119.4
Scaldis	120.1	118.9	119.5
SR 3000	123.7	120.0	121.8
Gotham	122.3	120.5	121.4
Aurora	124.2	121.6	122.9
LSD @ 0.05	1.8	1.4	

Table 2. Morphological characteristics of hard fescue varieties grown near Philomath, Oregon in 2005 and 2006. The Philomath test was grown on Willamette silt loam with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. The trials were conducted using a randomized complete block design. Plant spacings were 1.5 feet within rows and 3 feet between rows.

NAME	Plant Height (cm)		Flag Leaf Height (cm)		Flag Leaf Length (cm)		Flag Leaf Width (mm)	
	2005	2006	Average	2005	2006	Average	2005	2006
Gotham	37.4	46.7	42.1	12.7	15.8	14.2	3.1	3.5
Eureka II	40.2	52.3	46.2	14.3	18.6	16.5	3.3	3.7
Aurora	43.1	53.3	48.2	15.2	17.0	16.1	2.7	3.0
Reliant	43.4	55.0	49.2	14.9	19.9	17.4	2.9	3.1
Scaldis	49.0	59.0	54.0	16.4	19.7	18.0	3.7	4.1
SR 3000	44.4	55.2	49.8	14.5	17.6	16.0	4.0	4.1
LSD @ 0.05	3.0	3.2		2.5	2.6		NS	NS
							0.20	0.18

NAME	Leaf Sheath Length (cm)		Tiller Leaf Length (cm)		Tiller Leaf Width (mm)		Panicle Length (cm)	
	2005	2006	Average	2005	2006	Average	2005	2006
Gotham	8.1	10.0	9.0	4.2	4.7	4.5	2.3	2.4
Eureka II	9.5	11.9	10.7	4.2	4.8	4.5	1.4	1.2
Aurora	8.7	11.1	9.9	3.8	4.5	4.2	1.8	1.5
Reliant	10.8	12.7	11.7	4.2	4.6	4.4	2.3	2.3
Scaldis	11.0	13.4	12.2	4.3	5.2	4.8	1.9	2.0
SR 3000	9.1	11.5	10.3	4.8	5.1	5.0	2.3	2.3
LSD @ 0.05	1.3	1.0		1.0	0.9		0.1	0.2
							0.8	0.7

Table 3. Seed characteristics of hard fescue varieties grown near Philomath, Oregon in 2005 and 2006. The Philomath test was grown on Willamette silt loam with a pH of 6.2. The trial consisted of three replications of each variety with 20 plants per replication. The trials was conducted using a randomized complete bloc design. Plant spacings were 1.5 feet within rows and 3 feet between rows.

NAME	Lemma Length (mm)			Lemma Width (mm)			Awn Length (mm)		
	2005	2006	Average	2005	2006	Average	2005	2006	Average
Reliant	4.79	4.83	4.81	1.03	1.07	1.05	1.75	1.78	1.77
Gotham	4.67	4.70	4.68	1.17	1.20	1.18	1.42	1.38	1.40
Scaldis	4.57	4.63	4.60	1.03	1.07	1.05	1.60	1.75	1.68
SR 3000	4.57	4.67	4.62	1.17	1.17	1.17	1.55	1.51	1.53
Eureka II	4.47	4.57	4.52	1.03	1.03	1.03	1.10	1.25	1.17
Aurora	4.43	4.47	4.45	1.10	1.13	1.12	1.58	1.75	1.67
LSD @ 0.05	0.28	0.30		0.09	0.12		NS	NS	

TABLE 7D. MEAN TURFGRASS QUALITY RATINGS OF HARD AND SHEEP FESCUE CULTIVARS
GROWN AT THREE LOCATIONS UNDER SHADE 1/
2004 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/				
NAME	IL2	NE1	UT1	MEAN
BERKSHIRE	6.0	6.6	5.6	6.1
RELIANT IV (A01630REL)	6.0	7.0	5.2	6.1
PICK HF #2	6.4	6.4	4.9	5.9
SPM	6.1	5.8	5.7	5.9
IS-FL 28	6.2	6.2	5.1	5.8
PREDATOR	5.7	6.1	5.4	5.7
QUATRO	5.8	6.1	5.0	5.6
OXFORD	6.4	5.4	5.0	5.6
SCALDIS	6.2	5.2	5.2	5.5
SR 3000	6.0	5.3	3.9	5.1
SRX 3K	5.8	4.8	4.3	5.0
LSD VALUE	0.7	0.8	2.3	0.8
C.V. (%)	7.1	8.0	28.1	15.8

TABLE 7E. MEAN TURFGRASS QUALITY RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS
GROWN AT THREE LOCATIONS UNDER SHADE 1/
2004 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/				
NAME	IL2	NE1	UT1	MEAN
SEABREEZE	4.4	5.6	4.7	4.9
DAWSON E	4.8	5.0	4.6	4.8
SRX 55R	4.8	5.9	3.4	4.7
LSD VALUE	1.1	0.6	0.7	0.5
C.V. (%)	14.7	7.2	10.9	11.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 8D.

GENETIC COLOR RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2004 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

NAME	IA1	IL1	IL2	IN1	KY1	MA1	ME1	MN1	ND1	NE1	NJ1	NJ2	PA1	QE1	SD1	UT1	VA1	WA3	WI1	MEAN
SPM	7.0	6.7	7.3	6.3	7.0	5.3	6.3	6.3	6.7	8.0	7.0	7.7	8.0	7.7	7.0	5.7	7.7	6.0	7.3	6.9
PREDATOR	7.3	7.0	5.0	7.0	8.0	5.3	7.3	7.3	6.3	7.0	5.0	6.7	8.7	7.7	7.0	6.3	7.3	6.0	6.7	6.8
OXFORD	7.0	6.7	6.0	6.3	7.0	6.0	6.3	6.7	6.3	7.3	6.3	7.0	8.0	7.3	7.0	6.0	7.3	5.3	6.3	6.6
PICK HF #2	7.0	7.0	7.3	7.3	6.7	5.7	6.7	7.0	7.0	6.0	5.0	6.7	7.3	7.3	6.0	7.0	6.7	6.0	6.3	6.6
★ IS-FL-28	7.0	6.7	6.3	6.7	6.3	6.0	6.3	6.3	6.7	7.3	6.3	7.3	7.3	7.3	6.3	6.7	7.0	5.7	5.3	6.6
QUATRO	7.0	7.0	8.3	5.0	7.3	6.0	6.0	7.0	6.3	7.3	3.3	5.7	7.7	7.3	8.0	5.7	7.0	5.3	7.0	6.5
BERKSHIRE	7.0	6.3	7.0	7.0	7.0	5.3	6.7	5.7	6.0	7.7	5.3	6.7	7.0	7.0	6.7	6.7	7.3	6.0	6.0	6.5
RELANT IV (A01630REL)	7.3	6.7	5.7	5.7	7.0	6.0	6.7	7.0	6.0	7.3	5.7	6.7	7.0	7.3	5.7	5.7	6.7	6.7	5.3	6.4
SCALDIS	7.0	6.3	5.3	6.7	7.0	5.3	7.3	6.0	6.7	7.0	4.7	5.7	7.7	7.7	6.3	6.3	7.0	4.7	6.0	6.4
SRX 3K	7.0	6.0	5.0	6.7	7.3	5.3	6.7	6.7	6.0	6.3	3.7	6.7	6.7	7.3	5.7	6.0	7.0	5.3	6.3	6.2
SR 3000	7.0	6.0	5.0	5.3	7.7	5.7	7.0	5.7	6.0	6.0	4.3	5.3	6.0	7.0	6.0	6.7	7.0	5.0	6.3	6.1
LSD VALUE	0.4	1.0	2.4	1.3	1.6	1.0	1.8	2.2	1.2	1.1	2.6	1.5	1.2	1.0	1.2	1.2	1.0	2.0	1.3	0.3
C.V. (%)	3.5	9.2	24.3	13.1	13.8	11.1	16.9	21.4	11.6	9.6	31.9	14.1	10.0	8.2	11.0	11.5	8.5	22.1	12.4	14.5

TABLE 8E.

GENETIC COLOR RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2004 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

NAME	IA1	IL1	IL2	IN1	KY1	MA1	ME1	MN1	ND1	NE1	NJ1	NJ2	PA1	QE1	SD1	UT1	VA1	WA3	WI1	MEAN
SRX 55R	8	5.3	2.7	5.0	7.7	6.0	5.3	3.3	7.3	4.0	5.0	4.3	5.7	7.0	6.0	5.7	6.7	5.3	7.0	5.6
SEABREEZE	7	6.0	3.7	4.3	6.3	5.7	7.0	4.0	6.3	5.7	3.3	4.0	5.3	7.0	6.0	4.7	5.3	5.7	6.7	5.5
DAWSON E	7	5.3	2.3	3.7	5.7	5.7	5.7	3.3	5.7	8.0	3.0	3.3	4.0	6.3	5.7	5.0	6.0	5.0	6.0	5.1
LSD VALUE	0	1.5	2.3	1.2	0.9	1.2	1.2	2.2	1.3	0.5	2.8	0.8	0.8	0.5	0.5	1.8	1.2	1.5	1.1	0.3
C.V. (%)	0	17.0	49.0	17.2	8.8	12.9	12.4	38.7	12.7	5.7	46.7	12.1	9.4	4.9	5.7	21.6	12.4	17.7	10.2	16.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

#200700282

TABLE 10D. LEAF TEXTURE RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2004 DATA

NAME	LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/				
	MI1	MN1	ND1	NY1	QE1
QUATRO	8.0	7.7	9.0	7.7	8.0
BERKSHIRE	7.7	8.3	9.0	7.7	7.0
IS-FL 28	8.0	8.0	9.0	7.3	7.0
PICK HF #2	7.7	8.0	9.0	7.3	7.0
RELIANT IV (A01630REL)	8.0	8.0	8.7	7.3	7.0
OXFORD	7.3	8.0	9.0	7.3	7.0
SRX 3K	7.3	7.7	9.0	7.7	6.7
SCALDIS	8.0	7.0	9.0	7.3	7.0
SPM	7.3	8.0	9.0	7.0	7.0
SR 3000	7.3	8.0	9.0	7.0	7.0
PREDATOR	7.3	6.7	9.0	7.7	7.0
LSD VALUE	0.7	1.4	0.3	0.8	0.3
C.V. (%)	6.0	11.2	1.9	7.1	2.5

TABLE 10E. LEAF TEXTURE RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2004 DATA

NAME	LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/				
	MI1	MN1	ND1	NY1	QE1
SRX 55R	7.7	8.0	9.0	7.7	7.7
SEABREEZE	7.7	6.7	9.0	7.3	7.7
DAWSON E	7.3	7.7	8.7	7.0	7.0
LSD VALUE	0.9	1.2	0.5	0.8	0.4
C.V. (%)	7.6	10.0	3.8	6.4	6.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 18D. WINTER COLOR RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2004 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	KY1	VA1	MEAN
QUATRO	8.7	8.0	8.3
PICK HF #2	8.3	7.7	8.0
PREDATOR	7.7	7.7	7.7
SCALDIS	6.7	8.0	7.3
SPM	6.7	8.0	7.3
RELIANT IV (A01630REL)	7.3	7.3	7.3
BERKSHIRE	7.0	6.7	6.8
IS-FL 28	6.0	7.7	6.8
SRX 3K	6.3	7.3	6.8
SR 3000	6.7	6.3	6.5
OXFORD	5.7	7.0	6.3
LSD VALUE	1.3	1.0	0.8
C.V. (%)	11.4	8.5	10.0

TABLE 18E. WINTER COLOR RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2004 DATA

WINTER COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	KY1	VA1	MEAN
SRX 55R	5.0	6.3	5.7
SEABREEZE	4.7	5.0	4.8
DAWSON E	4.0	5.0	4.5
LSD VALUE	0.5	1.1	0.6
C.V. (%)	7.3	12.2	10.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

#200700282

TABLE 20D. LEAF SPOT RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2004 DATA

LEAF SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	ME1	NJ2	MEAN
PICK HF #2	8.7	7.3	8.0
SPM	8.7	7.0	7.8
IS-FL 28	8.7	6.3	7.5
BERKSHIRE	9.0	5.7	7.3
SRX 3K	8.7	5.7	7.2
RELIANT IV (A01630REL)	8.0	6.0	7.0
OXFORD	8.0	5.7	6.8
PREDATOR	7.3	6.3	6.8
SR 3000	6.7	5.7	6.2
QUATRO	8.0	3.7	5.8
SCALDIS	7.0	4.0	5.5
LSD VALUE	1.6	1.3	1.0
C.V. (%)	12.4	13.5	13.0

TABLE 20E. LEAF SPOT RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2004 DATA

LEAF SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	ME1	NJ2	MEAN
SRX 55R	7.3	6.3	6.8
SEABREEZE	6.0	5.3	5.7
DAWSON E	3.7	5.3	4.5
LSD VALUE	2.9	0.9	1.5
C.V. (%)	31.7	10.2	23.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

#200700282

TABLE 22D. DOLLAR SPOT RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2005 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	MA1	PA1	MEAN
RELIANT IV (A01630REL)	8.0	9.0	8.5
QUATRO	8.3	8.3	8.3
SPARTAN II (PICK HF #2)	8.3	8.3	8.3
BERKSHIRE	8.0	8.3	8.2
SPM	8.3	8.0	8.2
★ <u>GOITAM (IS-EL 28)</u>	7.7	8.3	8.0
PREDATOR	7.7	8.0	7.8
OXFORD	7.0	8.7	7.8
SRX 3K	6.7	8.3	7.5
SCALDIS	6.3	8.3	7.3
SR 3000	6.3	8.0	7.2
LSD VALUE	2.4	1.4	1.4
C.V. (%)	19.9	10.4	15.5

TABLE 22E. DOLLAR SPOT RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2005 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	MA1	PA1	MEAN
SEABREEZE	6.7	6.3	6.5
SRX 55R	5.3	5.7	5.5
DAWSON E	6.0	3.3	4.7
LSD VALUE	1.8	1.3	1.1
C.V. (%)	18.4	16.0	17.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 22D. RED THREAD RATINGS OF HARD AND SHEEP FESCUE CULTIVARS 1/
2004 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE 2/

NAME	ME1	PA1	WA3	WI1	MEAN
SRX 3K	9.0	9.0	5.0	9.0	8.0
PREDATOR	8.3	9.0	5.7	8.7	7.9
OXFORD	8.3	8.3	6.0	9.0	7.9
SPM	7.7	8.0	6.7	9.0	7.8
★ IS-FL 28	8.3	8.3	5.3	9.0	7.8
RELIANT IV (A01630REL)	8.3	7.3	6.0	9.0	7.7
PICK HF #2	9.0	7.3	5.3	9.0	7.7
BERKSHIRE	8.7	8.0	4.7	9.0	7.6
SR 3000	7.7	8.3	5.3	9.0	7.6
SCALDIS	8.0	8.3	4.3	8.7	7.3
QUATRO	7.3	7.7	4.3	9.0	7.1
LSD VALUE	0.9	1.0	1.9	0.4	0.6
C.V. (%)	7.0	7.7	21.7	2.8	9.5

TABLE 22E. RED THREAD RATINGS OF SLENDER CREEPING RED FESCUE CULTIVARS 1/
2004 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE 2/

NAME	ME1	PA1	WA3	WI1	MEAN
SEABREEZE	6.7	6.3	4.3	8.3	6.4
DAWSON E	5.7	6.7	5.0	8.0	6.3
SRX 55R	6.7	5.3	5.0	7.3	6.1
LSD VALUE	2.1	1.6	1.7	2.4	1.0
C.V. (%)	20.4	16.4	22.1	18.9	19.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S)

(bt: 4/24/08) DLF International Seeds and Rutgers, The State University of New Jersey

2. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER

IS-FL 28

3. VARIETY NAME

Gotham

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)

PO Box 229/175 West H Street
Halsey, OR 97348
USA

5. TELEPHONE (Include area code)

(541) 369-2251

6. FAX (Include area code)

(541) 929-4087

7. PVPO NUMBER

#200700282

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

☒ YES☐ NO

10. Is the applicant the original owner?

☒ YES☐ NOIf no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES☐ NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES☐ NO

If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT F
DECLARATION REGARDING DEPOSIT**

NAME OF OWNER (S) DLF International Seeds <i>and Rutgers, The State University of New Jersey</i> <i>(dt: 4/29/2008)</i>	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) PO Box 229/175 West H Street Halsey, OR 97348 USA	TEMPORARY OR EXPERIMENTAL DESIGNATION IS-FL 28 VARIETY NAME Gotham
NAME OF OWNER REPRESENTATIVE (S) Stephen W. Johnson	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) PO Box 229/175 West H Street Halsey, OR 97348 USA	FOR OFFICIAL USE ONLY PVPO NUMBER #200700282

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Stephen W. Johnson
 Signature

April 5, 2007
 Date